DOWLEX™ 2517

The Dow Chemical Company - Polyethylene Resin

Thursday, October 10, 2019

General Information

Product Description

DOWLEX™ 2517 Polyethylene Resin is a narrow molecular weight distribution copolymer designed to offer good ESCR and low temperature properties with excellent flexibility. This resin has good processability over a wide range of molding conditions.

- Linear Low Density Polyethylene
- For lids, housewares and containers
- Excellent low temperature flexibility, good ESCR

Complies with:

- U.S. FDA FCN 424
- Canadian HPFB No Objection (With Limitations)
- EU, No 10/2011
- U.S. FDA-DMF
- U.S. USP 23
  - Consult the regulations for complete details.

General			
Material Status	• Commercial: Active		
Regional Availability	• Asia Pacific	• North America	
Additive	• Antiblock: No	• Processing Aid: No	• Slip: No
Agency Ratings	• DMF Unspecified Rating • EU No 10/2011	• FDA FCN 424 • HPFB (Canada) No Objection [1]	• USP 23
Forms	• Pellets		
Processing Method	• Injection Molding		

ASTM & ISO Properties [2]

Physical	Typical Value (English)		Typical Value (SI)		Test Method
Density / Specific Gravity	0.919		0.919		ASTM D792
Melt Mass-Flow Rate (MFR) (190°C/2.16 kg)	25	g/10 min	25	g/10 min	ASTM D1238
Environmental Stress-Cracking Resistance (ESCR)					ASTM D1693
122°F (50°C), 100% Igepal, F50	4.00	hr	4.00	hr	
Mechanical	**Typical Value (English)**		**Typical Value (SI)**		**Test Method**
Tensile Strength					ASTM D638
Yield	1400	psi	9.65	MPa	
Break	1300	psi	8.96	MPa	
Tensile Elongation					ASTM D638
Yield	3.0	%	3.0	%	
Break	600	%	600	%	
Flexural Modulus - 2% Secant	34000	psi	234	MPa	ASTM D790B
Impact	**Typical Value (English)**		**Typical Value (SI)**		**Test Method**
Tensile Impact Strength [3]	190	ft·lb/in²	399	kJ/m²	ASTM D1822

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Hardness	Typical Value (English)	Typical Value (SI)	Test Method
Durometer Hardness (Shore D)	45	45	ASTM D2240

Thermal	Typical Value (English)	Typical Value (SI)	Test Method
Deflection Temperature Under Load			ASTM D648
66 psi (0.45 MPa), Unannealed	103 °F	39.4 °C	
Brittleness Temperature	< -105 °F	< -76.1 °C	ASTM D746
Vicat Softening Temperature	197 °F	91.7 °C	ASTM D1525
Melting Temperature (DSC)	255 °F	124 °C	Internal Method
Peak Crystallization Temperature (DSC)	218 °F	103 °C	Internal Method

Additional Information
Plaque molded and tested in accordance with ASTM D4976.

Notes

[1] With limitations

[2] Typical properties: these are not to be construed as specifications.

[3] Type S